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equipment must be located and operated in a manner that minimizes the potential for microorganisms and particulate matter to contaminate components, dietary supplements, or contact surfaces;

- (e) Provide adequate light in:
- (1) All areas where components or dietary supplements are examined, processed, or held;
- (2) All areas where contact surfaces are cleaned; and
- (3) Hand-washing areas, dressing and locker rooms, and bathrooms.
- (f) Use safety-type light bulbs, fixtures, skylights, or other glass or glass-like materials when the light bulbs, fixtures, skylights or other glass or glass-like materials are suspended over exposed components or dietary supplements in any step of preparation, unless your physical plant is otherwise constructed in a manner that will protect against contamination of components or dietary supplements in case of breakage of glass or glass-like materials.
- (g) Provide effective protection against contamination of components and dietary supplements in bulk fermentation vessels, by, for example:
 - (1) Use of protective coverings;
- (2) Placement in areas where you can eliminate harborages for pests over and around the vessels;
- (3) Placement in areas where you can check regularly for pests, pest infestation, filth or any other extraneous materials; and
 - (4) Use of skimming equipment.
- (h) Use adequate screening or other protection against pests, where necessary.

§111.23 Under this subpart C, what records must you make and keep?

- (a) You must make and keep records required under this subpart C in accordance with subpart P of this part.
- (b) You must make and keep records of the written procedures for cleaning the physical plant and for pest control.
- (c) You must make and keep records that show that water, when used in a manner such that the water may become a component of the dietary supplement, meets the requirements of §111.15(e)(2).

Subpart D—Equipment and Utensils

§111.25 What are the requirements under this subpart D for written procedures?

You must establish and follow written procedures for fulfilling the requirements of this subpart D, including written procedures for:

- (a) Calibrating instruments and controls that you use in manufacturing or testing a component or dietary supplement;
- (b) Calibrating, inspecting, and checking automated, mechanical, and electronic equipment; and
- (c) Maintaining, cleaning, and sanitizing, as necessary, all equipment, utensils, and any other contact surfaces that are used to manufacture, package, label, or hold components or dietary supplements.

§ 111.27 What requirements apply to the equipment and utensils that you use?

- (a) You must use equipment and utensils that are of appropriate design, construction, and workmanship to enable them to be suitable for their intended use and to be adequately cleaned and properly maintained.
- (1) Equipment and utensils include the following:
- (i) Equipment used to hold or convey;
- (ii) Equipment used to measure;
- (iii) Equipment using compressed air or gas;
- (iv) Equipment used to carry out processes in closed pipes and vessels;and
- (v) Equipment used in automated, mechanical, or electronic systems.
- (2) You must use equipment and utensils of appropriate design and construction so that use will not result in the contamination of components or dietary supplements with:
 - (i) Lubricants;
 - (ii) Fuel;
 - (iii) Coolants;
 - (iv) Metal or glass fragments;
- (v) Filth or any other extraneous maserial:
- (vi) Contaminated water: or
- (vii) Any other contaminants.
- (3) All equipment and utensils you use must be: